L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR

G1 X,Cy,Ak

FILE 'HCAPLUS' ENTERED AT 10:48:07 ON 28 APR 2010 1 S L3

L4 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Preparation of 17β -acetamide-4-azasteroids as androgen receptor modulators

GI

L4

AB Azasteroids of structural formula I [X, Y = H, halo, OH, alkoxy, hydroxymethyl, alkyl; R1 = H, acyl, OH, alkyl, etc.; R1R4 = 5-6 membered ring; R2 = H, alkyl; R3 = aryl, alkylaryl, heteroaryl, alkyl, etc.; R2R3 = 5-6 membered ring; R4 = halo, alkyl, cyclopropa, oxo, etc.] are prepared as modulators of the androgen receptor (AR) in a tissue selective manner. These

compds. are useful in the enhancement of weakened muscle tone and the treatment of conditions caused by androgen deficiency or which can be ameliorated by androgen administration, including osteoporosis, osteopenia, glucocorticoid-induced osteoporosis, periodontal disease, bone fracture, bone damage following bone reconstructive surgery, sarcopenia, frailty, aging skin, male hypogonadism, postmenopausal symptoms in women, atherosclerosis, hypercholesterolemia, hyperlipidemia, obesity, aplastic anemia and other hematopoietic disorders, inflammatory arthritis and joint repair, HIV-wasting, prostate cancer, benign prostatic hyperplasia (BPH), cancer cachexia, Alzheimer's disease, muscular dystrophies, cognitive decline, sexual dysfunction, sleep apnea, depression, premature ovarian failure, and autoimmune disease, alone or in combination with other active agents. Thus, II was prepared Some of the compds. had IC50 values of 1 $\mu\rm M$ or less in an assay for endogenously expressed AR.

ACCESSION NUMBER: 2005:1154379 HCAPLUS Full-text

DOCUMENT NUMBER: 143:406045

TITLE: Preparation of 17β -acetamide-4-azasteroids as

androgen receptor modulators

INVENTOR(S): Wang, Jiabing; Mcvean, Carol A.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 93 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.						KIND		DATE		APPL	ICAT	DATE							
WO	2005	 A1	_	20051027			WO 2	005-	20050404										
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AU	AU 2005232619						2008	0724											
CA	CA 2562132					A1 20051027				CA 2005-2562132						20050404			
EP	1734	1734964				A1 20061227				EP 2005-733118					20050404				
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CN	1942	A 20070404				CN 2005-80012086						20050404							
JP	JP 2007532550					T 20071115			JP 2007-507446						20050404				
US 20080125399				A1	A1 20080529			US 2006-594853						20060929					
IN 2006DN06434					A	A 20070831				IN 2006-DN6434						20061101			
ORITY APPLN. INFO.:										US 2004-560385P						P 20040408			
										WO 2	005-	US11	537	•	W 2	0050	404		

L5

=> d 15 L5 HAS NO ANSWERS L5 STR

L6 19 S L5 SSS SAM L7 449 S L5 SSS FULL

FILE 'HCAPLUS' ENTERED AT 10:51:13 ON 28 APR 2010

L8 12 S L7

GΙ

L9 12 S L8 AND (PY<=2004 OR AY<=2004 OR PRY<=2004)

L10 11 S L9 NOT L4

L10 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2010 ACS on STN TI Preparation of substituted 4-aza-3-oxo-steroids for use as $5\alpha\text{-reductase}$ inhibitors

Ι

Me R17 R17? R16 R16?

Steroids such as $4-aza-5\alpha$ -androstan-ones I [1,2-, 5,6-saturated or unsatd.; R4 = H, Me, Et; R7 = R7a = H, OH, alkyl, alkenyl, carbamoyloxy, carboxy, etc.; R7R7a = oxo, cycloalkyl, etc.; R16 = R16a = H, alkyl; R16R16a = cycloalkenyl; R17 = R17a = H, acyl, carbamoyl, aminoalkyl, alkyl, etc.; R17R17a = oxo, etc.] were prepared as 5α -reductase inhibitors for treatment of hyperandrogenic conditions. Thus, 4-methyl- 17β -(trimethylacetamido)- 5α -4-azaandrostan-3-one was prepared via oximation of 4-methyl-3-oxo- 5α -4-azaandrostan-17-carboxaldehyde, hydrogenation to form the corresponding amine followed by N-acylation with Me3CCO2Cl. The prepared compds. were tested for inhibition of human prostatic and scalp 5α -reductase, however, activities for specific compds. were not presented.

ACCESSION NUMBER: 1997:776029 HCAPLUS Full-text

DOCUMENT NUMBER: 128:61680

ORIGINAL REFERENCE NO.: 128:12090h, 12091a

TITLE: Preparation of substituted 4-aza-3-oxo-steroids for

use as 5α -reductase inhibitors

INVENTOR(S): Durette, Philippe L.; Hagmann, William; Rasmusson,

Gary H.; Tolman, Richard L.; Kopka, Ihor E.; Sahoo, Soumya P.; Esser, Craig K.; Steinberg, Nathan G.;

Graham, Donald W.; Witzel, Bruce E.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA

SOURCE: U.S., 139 pp., Cont.-in-part of U.S. Ser. No. 886,537,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

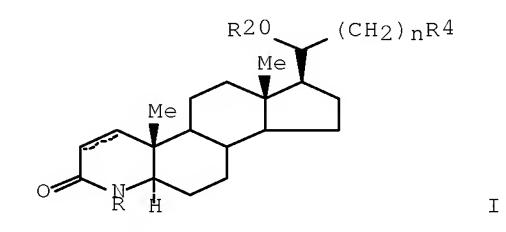
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5693809	А	19971202	US 1995-338571	19950512 <
PRIORITY APPLN. INFO.:			US 1992-886537	B2 19920520 <

L10 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Preparation of 17-ester, -amide, and -ketone derivatives of

3-oxo-4-azasteroids as testosterone 5α -reductase inhibitors

GΙ



Title compds. [I; R = H, Me, Et; R4 = COR1, CONHR2, CO2R3; R1 = (hetero)aryl; R2 = substituted Ph, (substituted)heteroaryl, cycloalkyl; R3 = cycloalkyl, (substituted)aryl; R20 = H, Me; n = 0-10; dashed line = optional bond] were prepared as testosterone 5α -reductase inhibitors (no data). Thus, 4-methyl- 17β -trifluoromethylsulfonyloxy-4-aza- 5α -androst-16-en-3-one was condensed with HC.tplbond.CCH2CH2CO2Me and the reduced product saponified to give I (R = Me, R4 CO2H, R20 = H, n = 3).

ACCESSION NUMBER: 1994:134931 HCAPLUS Full-text

DOCUMENT NUMBER: 120:134931

ORIGINAL REFERENCE NO.: 120:23791a,23794a

TITLE: Preparation of 17-ester, -amide, and -ketone

derivatives of 3-oxo-4-azasteroids as testosterone

 5α -reductase inhibitors

INVENTOR(S):
Graham, Donald W.; Aster, Susan D.; Hagmann, William;

Tolman, Richard L.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

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WO	9323	051			A1 19931125					 WO 1	 993-	 US46	31	19930517 <-				<
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PRIORIT	PRIORITY APPLN. INFO.:									US 1992-886021					A2 19920520 <			
								WO 1993-US4631					A 19930517 <					

FILE 'REGISTRY' ENTERED AT 10:55:59 ON 28 APR 2010

E 158938-23-9/RN

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1 S E87

1 S E99

FILE 'HCAPLUS' ENTERED AT 11:00:41 ON 28 APR 2010

E WANG JIABING?/AU

- L28 61 S E109-E110
- L29 12 S L28 AND (ANDROGEN? OR HORMON?)

E 851866-41-6/RN

- L30 9 S L29 AND (PY<=2004 OR AY<=2004 OR PRY<=2004)
- L31 8 S L30 NOT L4

E MCVEAN CAROL?/AU

L32 11 S E122

L26

L27

- L33 5 S L32 AND (ANDROGEN? OR HORMON?)
- L34 2 S L33 AND (PY<=2004 OR AY<=2004 OR PRY<=2004)

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